

Title (en)

HIGH-SPEED WIRELESS MULTI-PATH DATA NETWORK

Title (de)

DRAHTLOSES HOCHGESCHWINDIGKEITSMEHRWEGEDATENNNetzwerk

Title (fr)

Réseau de données par trajets multiples sans fil à grande vitesse

Publication

EP 3613101 B1 20240207 (EN)

Application

EP 18788065 A 20180417

Priority

- US 201762486376 P 20170417
- US 2018027946 W 20180417

Abstract (en)

[origin: US2018302238A1] A communication network includes nodes configured into a wireless ring network operating at one or more millimeter-wave frequencies. At least one of the nodes is configured to send and receive millimeter-wave wireless signals through an obstruction. In accordance with an exemplary embodiment of the network, one or more of the nodes may include small, phased-array antennas and transceivers, configured with radio electronics to mitigate the path loss through certain obstructions, such as walls, floors, ceilings, and other barriers within buildings, as well as attenuation from free-space path-loss, including moisture in air (humidity). The network may include multiple pairs of nodes to form one or more wireless communication paths through various obstructions. This may allow a high-speed, wireless, multi-ring network to be established, for example, within a structure, such as a building, without requiring additional cabling or wiring.

IPC 8 full level

H01Q 3/00 (2006.01); **H04B 1/40** (2015.01)

CPC (source: EP US)

H04B 1/40 (2013.01 - EP); **H04L 9/0819** (2013.01 - US); **H04L 9/0841** (2013.01 - EP US); **H04L 9/14** (2013.01 - EP US); **H04L 12/437** (2013.01 - EP US); **H04L 12/4633** (2013.01 - EP US); **H04L 41/06** (2013.01 - US); **H04L 41/12** (2013.01 - EP US); **H04W 12/0471** (2021.01 - EP US); **H04W 4/80** (2018.02 - EP US); **H04W 12/03** (2021.01 - EP US); **H04W 72/0453** (2013.01 - US); **H04W 84/12** (2013.01 - EP US)

Citation (examination)

US 2004110469 A1 20040610 - JUDD MANO D [US], et al

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 11784850 B2 20231010; **US 2018302238 A1 20181018**; EP 3613101 A1 20200226; EP 3613101 A4 20210113; EP 3613101 B1 20240207; ES 2972669 T3 20240613; WO 2018195059 A1 20181025

DOCDB simple family (application)

US 201815955136 A 20180417; EP 18788065 A 20180417; ES 18788065 T 20180417; US 2018027946 W 20180417